

2006 - 2011 Transportation Improvement Program

Adopted: July 19, 2005

City of Redmond Public Works

City of Redmond 2006-2011 Transportation Improvement Program Adopted: July 19, 2005

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Six-Year Transportation Improvement Program (TIP) Overview

1. What is the Six-Year Transportation Improvement Program (TIP)?

The Six-Year Transportation Improvement Program, or TIP, is a short-range planning document that is annually updated based on needs and policies identified in the Redmond Comprehensive Plan and Transportation Facility Plan. It represents Redmond's current complete list of needed projects and programs for the next six years. The document also identifies secured or reasonably expected revenues and expenditures for each of the projects included in the TIP. Typically, projects listed in the first three years of the document are shown as having secured funding while projects in the last three years can be partially or completely unfunded.

2. What is included in the TIP?

The central part of the TIP is Appendix A, simply titled Project List. All other portions of this document are meant to support and further clarify the Project List. The Project List includes two primary items, the list of projects sorted into seven categories and the current funding status of each project.

A. Project Categories

Projects contained in Redmond's TIP are organized into seven categories. Two of the categories are titled *Preservation* and *Safety and System Management*. These categories are the most basic to any transportation plan. Preservation and Safety are designated as the two highest priorities for receiving funding in the Redmond Comprehensive Plan. Preservation projects maintain the existing transportation system by overlaying, rehabilitating, and reconstructing existing transportation facilities, such as pavement and bridges. Safety improvements use a variety of tools to help reduce and prevent traffic collisions. System Management projects are included in the Safety category because they improve the operation of the existing transportation system by making it operate more safely, reliably, and efficiently.

The other five categories are titled *Major Street*, *Minor Street*, *Bikes and Pedestrians*, *Transit and High Occupancy Vehicles (HOV)* and *Transportation Demand Management*. Included in each of these categories are new projects that expand and improve existing facilities and services, or construct new pieces of our transportation system to make it easier to move around Redmond.

Programs are also included in their appropriate category. Programs are sources of ongoing funding used for collections of small projects throughout the City that help integrate the transportation system. These programs offer flexibility and responsiveness to immediate needs and opportunities, for example, the Neighborhood Traffic Calming Program. This program is a collaborative effort of City staff and local residents to identify traffic problems and develop solutions to reduce the impacts of traffic on neighborhoods.

B. Project Funding and Project Cost

The TIP Project List not only identifies the projects planned over the next six years, but it also reports the amount of funds currently allocated for each project during the years covered by the six-year TIP. The estimated total project cost is also reported on the TIP Project List. The estimated total project cost may differ from what is actually represented in the six-year TIP if the project was started prior to the first year covered in the TIP or the project is planned to continue beyond the final year covered in the TIP.

Planned expenditures for each project are summarized into four funding categories in Appendix A. These four funding categories represent the following revenue sources used to fund projects:

- 1. **Unfunded** The portion of the project cost planned for the six-years included in the TIP currently without approved funding.
- 2. Local Funding This includes the following funding categories:
 - a. **Funded by Other Local Jurisdictions** Funds that come from partnerships with other jurisdictions and organizations.
 - b. Capital Investment Program (CIP) The transportation portion of the CIP includes a variety of funding sources, including transfers from the City general fund, real estate excise tax, motor vehicle excise tax, motor vehicle fuel tax, sales tax on construction, and investment interest.
 - c. **Developer** Currently, the largest source of developer contribution is in frontage improvements, although supplemental mitigation has also been significant in recent years.
 - d. **Business Transportation Tax (Business License Surcharge)** 50 dollars per employee limited duration surcharge on Redmond's business license fees is earmarked for transportation projects.
 - e. **Impact Fees** Impact fees are assessed against building developments and improvements as they occur throughout the City.
 - f. **Other** Miscellaneous funding sources that do not fit into the categories above.
- 3. **Federal Funding** Federal grant funding is available through many competitive processes included in Federal transportation legislation.
- 4. **State Funding** State grant funding is available through a variety of competitive programs. The Transportation Improvement Board (TIB) administers many of these programs.

The Total Project Cost column included in Appendix A is based on varying levels of cost estimating. As the project moves from the planning level to a more detailed level of design, cost estimates are refined based on the more detailed information. The following defines the cost estimate types in order of increasing detail and certainty:

1. **Pre-Project Planning Estimate:** These project placeholders are allocations of funds used where a significant need has been identified, but planning efforts to develop a project scope are not yet significantly underway. Without some type

- of project scope it is very difficult to develop a detailed cost estimate. These cost estimates have the potential to change significantly as the project scope becomes more defined.
- 2. **Planning Level Estimate / Engineer Estimate:** These cost estimates are based on a generally defined scope that may include multiple alternatives. Cost estimates are usually based on limited fieldwork and general cost assumptions. No actual design work has been done prior to the development of these cost estimates. The cost estimate could still change significantly as design work begins but should be more reliable than the Pre-Project Planning Estimates.
- 3. **Preliminary Design Report:** These cost estimates are based on actual preliminary design work. If done for all facets of the project and there are not further additions to the project scope, these project estimates should represent a fairly dependable estimate of the total cost of the project.

Cost estimates are updated for many projects as part of the TIP update, either because new cost estimating was done or the current estimate was inflated at 3% per year to the year work would begin on the project.

3. Developing the TIP

The annual TIP update starts with the previously adopted TIP. Projects in the previously adopted TIP are reviewed and projects that have been completed, or because of changing conditions, are no longer needed are removed from the TIP. The remaining projects carried over from the previous TIP are reviewed for changes to cost estimates, project funding, schedule, or scope during the update process to ensure that the best information is represented in the TIP.

New projects are generated from many sources, including appointed boards and committees representing bicycles and pedestrians, parks, traffic safety, and trails; elected officials; City of Redmond staff; and other interested individuals and groups. In many cases, City of Redmond staff use tools such as the Redmond Pavement Management Program (RPM), analysis of accident data, and transportation modeling to help identify potential new projects. Potential new projects undergo a review of scope, priority, schedule, financing concepts, and compatibility with the Redmond Comprehensive Plan and Transportation Facility Plan.

Updated projects from the previous TIP and new projects are then used to create a draft TIP project list. The phasing and funding of these projects in the draft TIP is based on an evaluation of project priority compared with priorities laid out in the Redmond Transportation Facility Plan, commitments to projects and programs that are already underway, partnerships the City has entered into with other jurisdictions and agencies, and new opportunities that arise to leverage local transportation funding in combination with other funding sources.

Once the draft TIP has been developed, a public hearing is held to provide an opportunity for the community comment. Based on the results of the public hearing and comments

from the Redmond City Council a final version of the TIP is developed. This final version is then adopted by the City Council.

4. Relationship of the TIP to other Transportation Documents

A. Six-Year Capital Investment Program

Once adopted, the TIP helps to guide funding and implementation priorities during the development of the transportation portion of the 6-Year Capital Investment Program (CIP). Sometimes referred to as the Capital Improvement Program, the CIP is a six-year financial plan addressing capital needs and is updated along with the development of Redmond's biennial operating budget. The CIP can be considered a subset of the TIP. The CIP shows the City-funded portion of projects and is constrained by current budget forecasts, whereas the TIP shows the complete project list with the variety of funding sources and partners involved.

B. State and Federal Requirements

State law requires that each city develop a local TIP and that it be annually updated (RCW 35.77.010). It is also requires that projects be included in the TIP in order for cities to compete for transportation funding grants from most Federal and State sources. Federal grant funded and regionally significant projects from the first three years of the City's TIP are included in the Regional TIP, which is assembled by the Puget Sound Regional Council for King, Kitsap, Pierce, and Snohomish Counties. The regional TIPs (RTIP) from around the State are then combined to form the State TIP (STIP), which is approved by the Governor and then submitted to the Federal Highway Administration and Federal Transit Authority for their review and approval.

5. Future Updates

The TIP is an excellent guide to assist with planning transportation investments. The initiatives for next year's update remain much the same as the prior year.

- Review and update cost estimates included in the TIP.
- Integrate the results of the Transportation Master Plan and Comprehensive Plan into the TIP process and project list.
- Continue to enhance information reported in the TIP to ensure that it is as understandable and useful as possible.

6. Contact Information

Should you have questions or wish further information, please contact either of the following City staff:

Don Cairns, Transportation Manager, 556-2834, dcairns@ci.redmond.wa.us Joel Pfundt, Senior Transportation Planner, 556-2750, jpfundt@ci.redmond.wa.us

Appendix A - Project List (Exhibit A)

All Six-Year TIP projects and programs are arranged into seven categories: *Bikes and Pedestrians, Major Streets, Minor Streets, Preservation, Safety and System Management, Transit and HOV* and *Transportation Demand Management*. Projects and programs are classified in the category that best represents the project, in many cases projects and programs make improvements for multiple categories. The types of projects and programs included in each of these categories are described below:

- **Bikes and Pedestrians** Projects that focus on making the community more safe and accessible for non-motorized modes of transportation.
- Major Streets Large street projects that include significantly modifying a street section. These projects usually include some combination of the following: additional traffic lanes, additional turn lanes at intersections, bridges, new/modification of traffic signals, bike lanes, planter strips, medians, sidewalks, and/or trails.
- **Minor Streets** Small street projects that focus on minor modifications at a particular intersection or small segment of street. These projects usually include some combination of the following: additional turn lanes at intersections, new/modification of traffic signals, bike lanes, and /or sidewalks.
- **Preservation** Projects that maintain the existing transportation system by overlaying, rehabilitating, and reconstructing existing transportation facilities, such as pavement and bridges.
- **Safety and System Management** Projects that improve the operation of the existing transportation system by making it operate more safely, reliably, and efficiently.
- **Transit and HOV** Projects that improve the attractiveness of using transit and high occupancy vehicles (HOV) by increasing reliability and decreasing travel time.
- Transportation Demand Management Programs that improve existing transportation system efficiency by altering transportation system demand through management of pricing, services, employer incentives such as staggered work hours and telecommuting, and regulations, rather than capital improvements.

Six-Year Transportation Improvement Program

Project List

					Proj	Proj		Total			
	Street or Project	From	То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
	BIKES AND PEDESTRIANS										
B1	Bicycle Facilities Improvement Program			2006	2011		650			650	650
B2	Sidewalk Improvement Program			2006	2011		5,600			5,600	5,600
B7	School-Zone Speed Limit Flashing Beacons			2006	2006		100		100	200	300
В9	NE 51st Street Sidewalk	158th Avenue NE	West Lake Sammamish Parkway NE	2011	2011	360				0	360
B10	Puget Sound Energy Trail	Sammamish River	Red-Wood Road	2009	2010	515				0	515
B11	BNSF Railroad Right-of-Way Acquisition, Phase 1	Bear Evans Creek	NE 90th Street	2009	2009	2,500				0	2,500
B12	Bear & Evans Creek Trail	Sammamish River Trail	Puget Sound Energy Trail	2009	2011	4,800				0	8,000
B14	BNSF Railroad Right-of-Way Acquisition, Phase 2	NE 90th Street	NE 124th Street	2009	2009	1,000				0	1,000
B18	Bear Creek Class I Bicyclist and Pedestrian Trail	Redmond Way	Union Hill Road	2006	2006			420	140	560	646
B19	Puget Sound Energy Trail, Rose Hill Extension	132nd Avenue NE	Willows Road	2011	2011	550				0	550
B23	Redmond Way Sidewalks (South Side)	142nd Avenue NE	152nd Avenue NE	2010	2011	1,500				0	1,500
B24	Redmond Way Sidewalk (North Side)	142nd Avenue NE	145th Avenue NE	2009	2010	1,100				0	1,100
B25	SR 520 Bicycle/Pedestrian Bridge, Redmond Town Center to Marymoor Park	Marymoor Park	Bear Creek Parkway	2010	2011	6,100				0	6,100
B26	Red-Wood Rd Sidewalk (East Side)	NE 98th Street	NE 101st Court	2009	2010	600				0	600
										7,010	29,421
	MAJOR STREET										
C8	185th Avenue NE Extension	NE 80th Street	Union Hill Road	2006	2008		4,650			4,650	6,000
C14	Union Hill Road Widening Phase 2	Avondale Road	178th Place NE	2006	2008		1,650		2,250	3,900	3,900
C16	160th Avenue NE Extension	NE 98th Street	Red-Wood Road	2009	2011	16,000				0	17,400

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Six-Year Transportation Improvement Program

Project List

	Street or Project Fr	From T		Proj	Dun:		Six-Year Project Funding Information (All Dollars in Thousands)				
			То	Start	Proj End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
C17	Bellevue-Redmond Overlake Transportation Study (BROTS)			2006	2010		3,141			3,141	14,860
C18	NE 116th Street Widening	Red-Wood Road	Avondale Road	2009	2011	18,000				0	18,000
C20	West Lake Sammamish Parkway NE Capacity Improvements	Bel-Red Road	NE 51st Street	2006	2011	7,500	500			500	8,000
C22	SR 520 - West Lake Sammamish Parkway to SR 202 Interchange and HOV	West Lake Sammamish Pkwy	Redmond Way (SR 202)	2006	2010	2,874	126			126	3,000
C26	Novelty Hill Road Widening (King County)	Avondale Road	East City Limits	2006	2006		80			80	150
C27	148th Ave NE/SR 520 Intersection Modification and Widening	Eastbound to Northbound SR-520 off-ramp	Northbound to westbound SR 520 on-ramp	2009	2010	2,540	960			960	3,500
C30	Bear Creek Parkway Extension	Leary Way	Redmond Way	2006	2010	25,500	500			500	27,000
C32	Downtown East-West Corridors Preliminary Design Study	159th Place NE	170th Place NE	2009	2009	750				0	750
C33	NE 24th Street and 148th Avenue NE Intersection Widening	NE 24th Street	148th Avenue NE	2010	2011	7,000				0	7,000
C37	Redmond Way (SR 202) Additional Lanes, Stage II	East Lake Sammamish Parkway	East City Limits (187th Ave NE)	2006	2008		3,336		15,664	19,000	19,000
C38	NE 116th Street Culvert Replacement and Roadway Improvements	162nd Avenue NE	168th Avenue NE	2006	2006		1,073			1,073	4,788
C39	164th Avenue NE Extension	NE 76th Street	Cleveland Street	2011	2011	1,300				0	1,300
C40	161st Avenue NE Extension	Bear Creek Parkway	Redmond Way	2011	2011	9,300				0	9,300
										33,930	143,948
	MINOR STREET										
С9	NE 51st Street at 150th Avenue NE Traffic Signal	NE 51st Street	150th Avenue NE	2009	2009	245	55			55	300
C24	Redmond Way at 140th Avenue NE Eastbound Right Turn Lane	Redmond Way	140th Avenue NE	2006	2006		760			760	800
C28	Redmond Way at Willows Road Intersection Widening	Redmond Way	Willows Road	2010	2011	200	1,100			1,100	1,300

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Six-Year Transportation Improvement Program

Project List

				Proj	Proj		Six-Year Project Funding Information (All Dollars in Thousands)					
	,	Street or Project	From	То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
C31	Redmond Way at NE 76th Street Intersection Modification and Widening	Redmond Way	NE 76th Street	2006	2006	262	544			544	920	
C34	148th Avenue NE at Old Redmond Road Intersection Modification	148th Avenue NE	Old Redmond Road	2009	2009	200				0	200	
C35	East Lake Sammamish Parkway at 187th Avenue NE Intersection Improvement	East Lake Sammamish Parkway	187th Avenue NE	2009	2010	1,300	500			500	1,800	
C36	NE 65th Street and East Lake Sammamish Parkway Intersection Improvement	NE 62nd Street	NE 65th Street	2007	2008		1,500			1,500	1,500	
										4,459	6,820	
	PLANNING											
L2	Sammamish Valley Corridor Study			2009	2009	200				0	200	
L5	Transportation Master Plan Implementation			2006	2006		200			200	300	
										200	500	
	PRESERVATION											
P1	Pavement Management Program			2006	2011		6,000			6,000	6,000	
P2	Bridge Repair Program			2006	2011		300			300	300	
P3	East Lake Sammamish Parkway Rehabilitation	South City Limits (187th Avenue NE)	NE 65th Street	2007	2008		1,500			1,500	1,500	
P5	NE 116th Street (York) Bridge Replacement	NE 116th Street	Sammamish River	2006	2007		2,152	1,923		4,075	15,150	
P6	Avondale Road Bridge Rehabilitation at Bear Creek	Avondale Road	Bear Creek	2006	2006		100			100	100	
	SAFETY AND SYSTEM MANAGEN	ENT								11,975	23,050	
	SAFETY AND SYSTEM MANAGEM	II-N I		2000	0044		050			050	050	
S1	Neighborhood Traffic Calming Program			2006	2011		850			850	850	
S2	Channelization Improvement Program			2006	2011		300			300	300	

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Six-Year Transportation Improvement Program

Project List

	,	t or Project From To		Proj	Proj			Total			
			То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
S4	Miscellaneous/Advanced Engineering and Construction Program			2006	2011		550			550	550
S5	Street Lighting Improvement Program			2006	2011		260			260	260
S7	Utility Undergrounding Program			2007	2011		250			250	250
S16	Old Redmond Road Widening	132nd Avenue NE	140th Avenue NE	2006	2006		2,210			2,210	2,700
S18	Avondale Road Improvements	NE 95th Street	Novelty Hill Road	2009	2009	500				0	500
S22	Localized Efficiency Action Program (LEAP)			2009	2010	1,000				0	1,000
S26	Redmond Intelligent Transportation System (RITS)			2009	2010	750				0	750
S28	Redmond Intelligent Transportation System (Overlake to Downtown Redmond Corridor)	156th Avenue NE	Bear Creek Parkway	2006	2007		72	346		418	418
S29	Transportation Concurrency Management			2006	2011		600			600	600
S30	Redmond Intelligent Transportation System (Avondale Road Corridor)			2006	2007		384	691		1,075	1,075
S32	Old Redmond Road and West Lake Sammamish Way Traffic Signal	Old Redmond Road	West Lake Sammamish Parkway	2007	2008		325			325	325
S33	NE 85th Street Rechannelization	158th Avenue NE	166th Avenue NE	2006	2006		300			300	329
S34	164th Avenue NE Rechannelization	Cleveland Street	NE 87th Street	2006	2006		275			275	300
S36	NE 104th Street and 166th Avenue NE Traffic Signal	NE 104th Street	166th Avenue NE	2009	2009	300				0	300
S37	NE 116th Street and 172nd Ave NE Traffic Control	NE 116th Street	172nd Ave NE	2008	2008		325			325	325
										7,738	10,832
	TRANSIT AND HOV										<u> </u>
T5	Redmond Way Sidewalk and Transit Improvements	132nd Avenue NE	140th Avenue NE	2006	2007		1,603			1,603	1,700
Т6	Redmond Way Transit Improvements Phase 2	168th Avenue NE	SR 520	2010	2011	2,500				0	2,500

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Six-Year Transportation Improvement Program

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				Proj	Proj		Total				
	Street or Project	From	То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
T8	Demand Management Capital Construction			2006	2006		50			50	85
T11	Downtown Redmond Transit Center	161st Avenue NE	164th Avenue NE	2006	2007		6,345			6,345	7,100
										7,998	11,385
	TRANSPORTATION DEMAND MAN	NAGEMENT									
M1	Redmond Trip Reduction Incentive Program (R-TRIP) Partnership Phase II			2006	2011	1,000	200			200	1,200
M2	Citywide Rideshare Incentives			2006	2011	900				0	900
М3	Shuttle Program			2006	2008		522			522	800
M4	Business Transportation Resource (BTR) and Recognition Program			2006	2011	250	84			84	334
M5	Performance Based Incentive for Commute Trip Reduction			2006	2007		500	250		750	750
M6	Redmond Parking Management Program			2006	2007		139			139	140
M7	Development Required Transportation Mitigation Programs (TMP's), Maintenance & Support			2006	2011	150				0	150
M8	TDM Demonstration Programs/New Initiatives			2006	2011	300	600			600	900
М9	Workforce Options Transportation			2006	2011	300				0	300
M10	Bike Stations, Development & Operations			2006	2011	150				0	150
M11	Transportation Demand Management Program			2006	2011		545			545	545
M12	Residential Travel Demand Management Program			2006	2011	600				0	600
M13	Commute Trip Reduction (CTR) Program Administration			2006	2007				176	176	0
										3,016	6,769
				<u> </u>	TOTAL	120,896	54,366	3,630	18,330	76,326	232,725

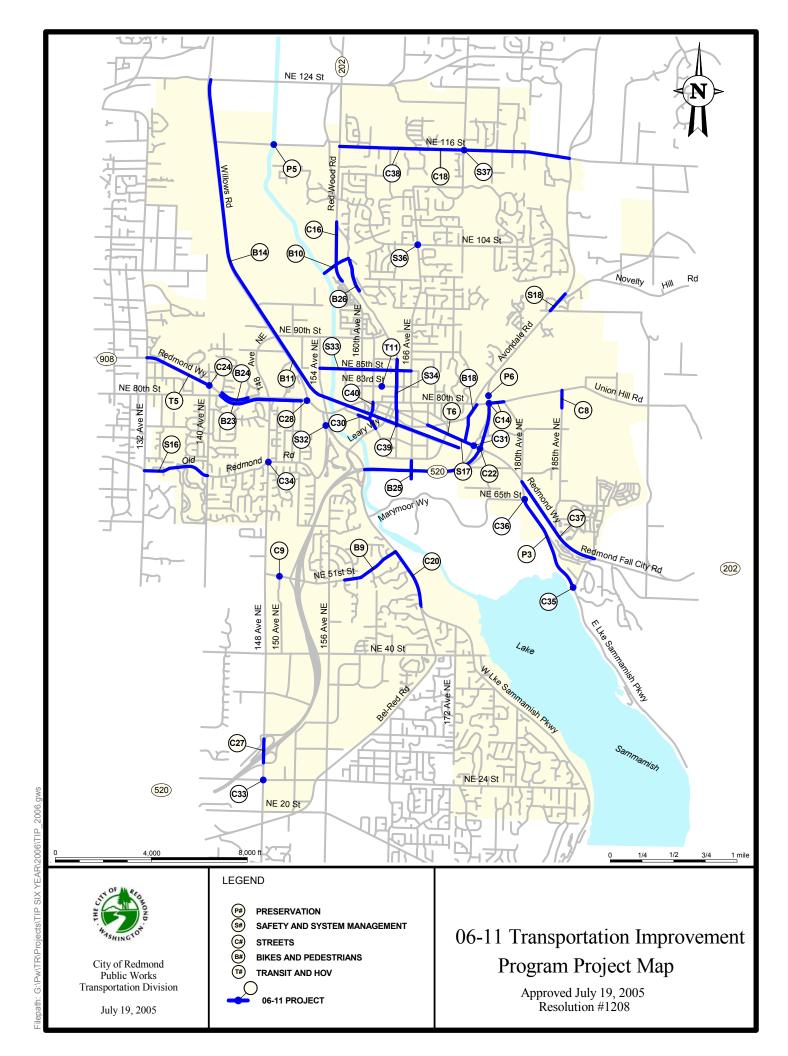
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Appendix B - Project Location Map

This map represents all of the projects that can be mapped from the TIP. Projects that were not mapped include programs and planning studies (e.g. Transportation Demand Management, pavement management, Transportation Master Planning).



Appendix C - Project Descriptions

More detailed project descriptions are provided in this section for the projects included in the TIP.

BIKES AND PEDESTRIANS

B1 Bicycle Facilities Improvement Program

Installation of improvements to bicycle lanes and routes on selected streets throughout City.

B2 Sidewalk Improvement Program

Installation of improvements to sidewalks and routes on selected streets throughout City.

B7 School-Zone Speed Limit Flashing Beacons

Design and install "20 MPH When Flashing" school speed limit flashing beacon signs for Redmond's Elementary Schools.

B9 NE 51st Street Sidewalk

Install sidewalk on the uncompleted portions on the south side of the roadway.

B10 Puget Sound Energy Trail

Construct permanent improvements on the trail that links Redmond-Woodinville Road with the planned pedestrian bridge over Sammamish River.

B11 BNSF Railroad Right-of-Way Acquisition, Phase 1

Acquisition of the Burlington Northern Santa Fe railroad right-of-way.

B12 Bear & Evans Creek Trail

The proposed project is a multi-use trail with associated enhancements linking the Puget Sound Energy Trail north of Farrel McWhirter Park to the Sammamish River Trail. The alignment generally follows that of Bear and Evans Creek. With the Bear Creek arm extending southwest across Avondale Road, Union Hill Road, and Redmond Way and the Evans Creek Arm extending south across Union Hill Road, SR 202, and East Lake Sammamish Parkway to the East Lake Sammamish Trail. Construction of the Trail will be phased.

B14 BNSF Railroad Right-of-Way Acquisition, Phase 2

Acquisition of the Burlington Northern Santa Fe railroad right-of-way.

B18 Bear Creek Class I Bicyclist and Pedestrian Trail

Construction of a paved Class 1 Trail. This trail is a portion of the Bear Creek arm of the Bear & Evans Creek Trail system that links into other regional trails. Project includes construction of a 12 foot wide paved trail connecting the existing trail underpass at Union Hill Road and either connecting to existing wide sidewalks along Redmond way.

B19 Puget Sound Energy Trail, Rose Hill Extension

Determine best alignment and extend Puget Sound Energy Trail from its terminus west of Willows Road to 132nd Avenue NE. Trail project would also design and construct a new crossing of Willows Road in the vicinity of the trail crossing.

B23 Redmond Way Sidewalks (South Side)

Construct new 5' sidewalk on south side of Redmond Way along two sections (142nd Ave NE to 145th Ave NE and 149th Ave NE to 152nd Ave NE).

B24 Redmond Way Sidewalk (North Side)

Construct new 5' sidewalk on the north side of Redmond Way from 142nd Ave NE to 145th Ave NE.

B25 SR 520 Bicycle/Pedestrian Bridge, Redmond Town Center to Marymoor Park

Construct nonmotorized bridge and approaches from Bear Creek Trail and Redmond Town Center to Marymoor Park. The purpose of this project is to connect Downtown Redmond and Marymoor Park. Bridge would be designed to create an attractive new gateway/landmark in the City.

B26 Red-Wood Rd Sidewalk (East Side)

Construct new curb, gutter and sidewalk on east side of Red-Wood Rd from NE 98th St to NE 101st Ct.

MAJOR STREET

MAJOR STREET

C8 185th Avenue NE Extension

This roadway improvement will complete the 185th Avenue NE corridor between the Redmond-Fall City Highway and Union Hill Road. This is supplemental mitigation requirement of the Millennium Projects. The City of Redmond will acquire the right of way and the developer will design and construct the new street segment.

C14 Union Hill Road Widening Phase 2

Construct additional roadway capacity, bicycle lanes, street lighting, sidewalk, with enhancements to the traffic signal systems at Union Hill Road / Avondale Road and at Union Hill Road / 178th Place NE. The project would include reconstruction of the pavement near the intersection of Union Hill Road / Avondale Road because of high volume of truck traffic.

C16 160th Avenue NE Extension

New 5-lane/4-lane roadway extension with 2 through lanes in each direction, center left turn lane/median, planting strips, and sidewalks. Extends street that terminates in the Rivertrail development to the street in the Redmond 74 Development. The street in the Redmond 74 development, which connects to Red-Wood Rd, would be widened from its current 2 lane configuration.

C17 Bellevue-Redmond Overlake Transportation Study (BROTS)

Provides Redmond's share of its BROTS commitment to Bellevue's BROTS Projects, as well as financial resources that can be used for BROTS projects that are Redmond's responsibility.

C18 NE 116th Street Widening

Based on the design report for this section of roadway, construct the portions of this roadway not completed by the subdivision developers.

C20 West Lake Sammamish Parkway NE Capacity Improvements

Project includes intersection widening at both NE 51st St. and Bel-Red Rd. to increase capacity. Both intersection widening projects are BROTS projects. The section of West Lake Sammamish Parkway between the two intersections will continue to be one through lane in each direction for most of the project length. Left turn lanes will be provided where necessary and improvements will be made to bicycle and pedestrian facilities.

C22 SR 520 - West Lake Sammamish Parkway to SR 202 Interchange and HOV

This project represents the potential contribution that Redmond will need to make to this project. This construction project is phase 3 of a WSDOT lead project to increase the capacity of the SR 520 / SR 202 interchange. This will be done be by adding additional lanes, fly-over ramps to the interchange, and HOV facilities.

C26 Novelty Hill Road Widening (King County)

City of Redmond will be working cooperatively with King County and their other partners on the EIS, planning, and design of this project.

C27 <u>148th Ave NE/SR 520 Intersection Modification and Widening</u>

Add a northbound lane between the eastbound SR 520 off-ramp and the westbound SR 520 on-ramp, construct a sidewalk adjacent to the added lane, and remove the traffic signal at the SR 520 eastbound to northbound off ramp. This signal is no longer needed because the new lane acts as a weave lane for traffic getting on-and-off of SR 520.

C30 Bear Creek Parkway Extension

Construct an extension of Bear Creek Parkway along an undetermined alignment between Leary Way and Redmond Way.

C32 <u>Downtown East-West Corridors Preliminary Design Study</u>

Preliminary design drawings for Cleveland Street, Redmond Way and the BNSF right-of-way would be developed to define the character of these three major east-west corridors in downtown Redmond. These plans would be used to make changes to the streetscape and traffic operations along Cleveland Street and Redmond Way pending the completion of Bear Creek Parkway.

MAJOR STREET

C33 NE 24th Street and 148th Avenue NE Intersection Widening

Widen intersection to increase capacity by addting dual left-turn lanes in both the westbound and eastbound directions on NE 24th St. The eastbound right turn lane on NE 24th St would also be extended.

C37 Redmond Way (SR 202) Additional Lanes, Stage II

Total extent and scope of the WSDOT project is a two stage major road widening project from SR 520 to Sahalee Way with a total cost of \$63 million. City of Redmond's contribution to project will result in additional bike lane width, a planter strip on each side of the roadway, the installation of a new traffic signal and a westbound right-turn lane at 187th Ave. NE, median landscaping, the additional southbound lane on an adjacent portion of East Lake Sammamish Parkway, additional pavement width for bike lanes on widened side streets, the illumination of SR 202 as well as the side streets, and utility undergrounding.

C38 NE 116th Street Culvert Replacement and Roadway Improvements

The 116th Culvert Replacement project will replace the existing corrugated metal pipe culvert that crosses NE 116th Street at approximately 165th Avenue NE and accommodates an unnamed Class 2 stream. To meet fish passage requirements, a concrete box culvert will be constructed. This project will also construct additional roadway improvements consistent with the recently approved NE 116th Street Corridor Plan. In general, the roadway section within the new project limits shall be two 11-foot travel lanes, two bike lanes, a 6-foot sidewalk on the south side, a 10-12-foot combined sidewalk/trail on the north side, and conversion of overhead utility lines.

C39 164th Avenue NE Extension

Construct new 164th Ave NE from NE 76th St to Cleveland St. Improvements include 1 through lane in each direction, bike lanes, parking, sidewalks, street lights, and storm drainage.

C40 161st Avenue NE Extension

Construct new 161st Ave NE from Bear Creek Pkwy Extension to Redmond Way. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, parking, sidewalks, street lights, and traffic signals at Cleveland St and Bear Creek Pkwy.

MINOR STREET

C9 NE 51st Street at 150th Avenue NE Traffic Signal

Install traffic signal at the intersection of NE 51st St and 150th Ave NE.

C24 Redmond Way at 140th Avenue NE Eastbound Right Turn Lane

A supplemental Mitigation Improvement in the Grass Lawn Transportation Management District required by CarrAmerica / Data I/O which includes adding eastbound to southbound right turn lane at 140th Ave NE and Redmond Way.

C28 Redmond Way at Willows Road Intersection Widening

Convert southbound lanes on Willows Road to provide left and left-through-right lanes to accommodate high AM and PM left turn movements. Add a westbound (Redmond Way) to northbound (Willows Rd.) right turn lane. Replace existing sidewalk.

C31 Redmond Way at NE 76th Street Intersection Modification and Widening

Project would increase vehicle capacity by adding a westbound right turn lane and transit access by adding a southbound right turn lane at the Redmond Way and NE 76th St intersection.

C34 148th Avenue NE at Old Redmond Road Intersection Modification

Extend northbound left turn lane on 148th Ave NE to improve traffic flow.

C35 <u>East Lake Sammamish Parkway at 187th Avenue NE Intersection Improvement</u>

Install traffic signal at E Lake Sammamish Pkwy and 187th Ave NE and add southbound left turn lane on E Lake Sammamish Pkwy.

MINOR STREET

C36 NE 65th Street and East Lake Sammamish Parkway Intersection Improvement

Reconstruct section of E Lake Sammamish Pkwy in the vicinity of NE 65th St to match street section to the north to be constructed as part of WSDOT SR 202 project and frontage improvements constructed by a developer to the south.

PLANNING

L2 Sammamish Valley Corridor Study

Redmond will partner with WSDOT, King County and the City of Woodinville to look at traffic operations in this corridor and investigate roadway alignment modifications to improve safety and increase capacity in the section of the corridor between Redmond and Woodinville. The corridor analysis will include an exploration of future design preferences for the Redmond-Woodinville Road, Willows Road, and 160th Avenue NE.

L5 Transportation Master Plan Implementation

The purpose of this project is to help ensure implementation of the Transportation Master Plan and transportation element of the Comprehensive Plan. It will be used to develop a new concurrency ordinance, new impact fees, and other possible revenue sources. Project prioritization will also be part of this project.

PRESERVATION

P1 <u>Pavement Management Program</u>

The purpose of the Pavement Management Program is to preserve and maintain the City's pavement infrastructure in a good condition.

P2 <u>Bridge Repair Program</u>

Provide repair and maintenance of the roadway bridges in the City.

P3 <u>East Lake Sammamish Parkway Rehabilitation</u>

Rehabilitate East Lake Sammamish Pkwy by install missing section of curb, gutter and sidewalk; removing some concrete pavement; and performing crack and seat process on remaining concrete pavement. A new pavement overlay will then be done.

P5 NE 116th Street (York) Bridge Replacement

This project is a cooperative effort with King County to share equally in the cost of the bridge replacement that spans the river. Other components of the project include, improvements to nonmotorized access and safety; river habitat improvements; and outdoor artwork.

P6 <u>Avondale Road Bridge Rehabilitation at Bear Creek</u>

The yearly inspection of this bridge in conjunction with the bridge inventory process determines the need for bridge repair, including pile reinforcement and bank stabilization.

SAFETY AND SYSTEM MANAGEMENT

S1 Neighborhood Traffic Calming Program

Identify locations within the City, and install physical control devices in neighborhood corridors to slow and control speeding traffic.

S2 Channelization Improvement Program

Provide street marking projects throughout the City.

S4 <u>Miscellaneous/Advanced Engineering and Construction Program</u>

Miscellaneous engineering and construction tasks at various sites within City.

S5 Street Lighting Improvement Program

Identify, inventory, prioritize and schedule street lighting enhancements. Manage the installation of both Puget Sound Energy owned and City of Redmond owned street lighting locations within the City.

SAFETY AND SYSTEM MANAGEMENT

S7 <u>Utility Undergrounding Program</u>

Perform undergrounding of selected overhead utilities, such as power, telephone, and television cable.

S16 Old Redmond Road Widening

This roadway widening project involves installation of curb, gutter sidewalk, underground utilities, street lights to match areas at both ends (Construction of missing section). The project also has a stormwater detention component as well.

S18 <u>Avondale Road Improvements</u>

Upgrade the existing traffic signal system and interconnect the signals at Avondale Road & NE 95th St. and at Novelty Hill Road. Construct capacity enhancements in the Avondale Road corridor in the vicinity of the two intersections in coordination with the County's Novelty Hill Road improvement project.

S22 Localized Efficiency Action Program (LEAP)

The purpose of LEAP is to streamline the design and construction of small improvement projects throughout the city to optimize the existing transportation system. LEAP will provide programmatic funding for localized projects, which are considered too large for maintenance staff, but are too small to be individually considered capital improvement projects. These projects are intended to address the following areas of concern: collision reduction, capacity augmentation, and multi-modal circulation. This program is being coordinated by the Business Tax Transportation Improvements (BT/TI) committee.

S26 Redmond Intelligent Transportation System (RITS)

Complete the multi-phase effort to upgrade, interconnect, coordinate and optimize the City's remaining old and outdated traffic signal control equipment. Also, provide improved detection and monitoring of transportation system in order provide better incident response and traveler information.

S28 Redmond Intelligent Transportation System (Overlake to Downtown Redmond Corridor)

Upgrade controller hardware, interconnect, coordinate and optimize the traffic signals along the NE 40th St./West Lake Sammamish Pkwy./Leary Way corridor from 156th Ave. NE to Bear Creek Pkwy. This 2.8 mile corridor is a key connection between the Overlake area and downtown Redmond.

S29 Transportation Concurrency Management

This program supports ongoing efforts to monitor the City's transportation system, identify problem areas, and develop and evaluate potential solutions in order to ensure that the city's transportation system develops concurrently with growth in the community. Particular items supported by this program include traffic counting, travel time studies, traffic modeling, on-call signal review, project cost estimating for the CIP/TIP, and various small area transportation related studies.

S30 Redmond Intelligent Transportation System (Avondale Road Corridor)

As part of this larger King County ITS project expand ongoing RITS project along the Avondale Rd corridor, into downtown Redmond and develop Redmond transportation management center.

S32 Old Redmond Road and West Lake Sammamish Way Traffic Signal

Install traffic signal at Old Redmond Rd and W Lake Sammamish Way.

S33 NE 85th Street Rechannelization

Rechannelize NE 85th St to one through lane in each direction, two-way left-turn lane, parellel parking and bike lanes. Project would include special treatments in front of the downtown Redmond Post Office and Fire Station 11.

S34 <u>164th Avenue NE Rechannelization</u>

Rechannelize street to one through lane in each direction, two-way left-turn lane, and bike lanes.

SAFETY AND SYSTEM MANAGEMENT

S36 NE 104th Street and 166th Avenue NE Traffic Signal

Install new traffic signal and rechannelize intersection at NE 104th St and 166th Ave NE.

S37 NE 116th Street and 172nd Ave NE Traffic Control

Install traffic signal or roundabout at NE 116th St and 172nd Ave NE.

TRANSIT AND HOV

T5 Redmond Way Sidewalk and Transit Improvements

Sound Transit funded project that includes portions of NE 85th St and Redmond Way in Redmond and Kirkland from 120th Ave NE to 140th Ave NE. Project within Redmond will include sidewalk improvements from 132nd to 139th, transit signal priority, barrier curb to eliminate left turn access from 132nd to 139th, u-turn treatments at 139th and 132nd, and extension of westbound right-turn lane by 1000 feet. The purpose of this project is to improve transit and vehicle flow in the corridor, improve pedestrian access to transit, and improve safety in the corridor. City of Redmond is contributing a small amount of funding to complete sidewalk from 139th to 140th.

T6 Redmond Way Transit Improvements Phase 2

Construct transit capacity improvements including roadway widening in the corridor in conjunction with Sound Transit.

T8 <u>Demand Management Capital Construction</u>

This project provides funding for capital-oriented projects and programs that support TDM goals and are located within the public right-of-way. It also provides opportunities for seed funding to employers in Redmond to partner with local and regional transit agencies to provide new or enhanced infrastructure to support transit use. Transit shelters, concrete pads, benches, drinking fountains, lighting, crossing aids, and other amenities that support transit and other alternative mode use could be eligible for funding.

T11 Downtown Redmond Transit Center

Construct a new transit center on NE 83rd St adjacent to the existing downtown Redmond park and ride. Project will expand the transit center to include six transit bays (five on street and one on the current turnaround site) and layover space for six coaches and one paratransit vehicle on the current turnaround site. Project will include installation of new shelters, construction of wide sidewalks, and landscaping. This project will support future development of the park and ride site as a transit oriented development.

TRANSPORTATION DEMAND MANAGEMENT

M1 Redmond Trip Reduction Incentive Program (R-TRIP) Partnership Phase II

The Redmond Trip Reduction Incentive Program (R-TRIP) provides financial and staff assistance to Redmond businesses to implement or enhance existing commute trip reduction programs for employees at their Redmond sites. Employers can select from a menu of TDM products or submit their own innovative programs for review and funding.

M2 <u>Citywide Rideshare Incentives</u>

The Citywide Rideshare Incentives program builds on past successes by streamlining delivery of incentives and expanding the program to a wider employer and employee audience by making the program available to all employers in Redmond. This will be done by directly providing incentives to the employees. To facilitate administration and ease of use, incentives will be provided via a debit card medium, with program participation and tracking occurring primarily via electronic/web-based means. The project will also match employer contributions, up to a maximum amount, with more favorable match rates being offered to small employers. Promotional and informational materials will be developed and marketed to employers and their employees.

TRANSPORTATION DEMAND MANAGEMENT

M3 Shuttle Program

Expand local shuttle service, extending to areas outside Willows and SE Redmond, with an emphasis on Overlake. Continue to work with King County Metro to identify potential new routes and partnership opportunities to add new service.

M4 Business Transportation Resource (BTR) and Recognition Program

As a resource primarily supporting small businesses, BTR develops, produces, and provides educational materials and technical support to link businesses to commute related tax benefits and programs to help them provide alternative solutions for their company and employees.

M5 Performance Based Incentive for Commute Trip Reduction

Program provides financial incentives to businesses who participate in the program rewarding them for each trip reduced, as measured by survey results.

M6 Redmond Parking Management Program

The Redmond Parking Management Program is an effort to serve both large and small businesses (including retail) by developing and implementing on-site parking management programs.

M7 <u>Development Required Transportation Mitigation Programs (TMP's), Maintenance & Support</u>
Provide annual program review, notifications and negotiate updates when initiated by building owner.

M8 TDM Demonstration Programs/New Initiatives

Advance trip reduction efforts to City-wide goal of 30% mode split through development of new TDM initiatives including origin based program (residential emphasis) and last/first mile concept (origin/destination links to transit station.)

M9 Workforce Options Transportation

Develop subsidized vanpool program to provide affordable transportation to low income commuters. Supports community diversity and workforce transportation to strengthen retail and manufacturing centers.

M10 Bike Stations, Development & Operations

Support bike station development and services at existing and new Redmond Transit Centers.

M11 Transportation Demand Management Program

Provides Capital Facilities such as transit shelters, pedestrian walkways and connections to transit, HOV priority parking programs, signage, etc. within the street right of way or in parking areas, designed to increase the effectiveness of measures that eliminate trip making or support the movement of more people in fewer vehicles, and help to reduce traffic congestion. Provides technical oversight and support to Capital Facilities also develops Non-Capital Programs to disseminate and/or increase awareness of TDM strategies and services among Redmond employers and citizens.

M12 Residential Travel Demand Management Program

Program to provide alternative mode use information incentives and innovative program grants for Redmond residents.

M13 Commute Trip Reduction (CTR) Program Administration

Supports the administration for the Citywide commute trip reduction (CTR) ordinance (state mandate).

Appendix D - Transportation Planning Document Relationship Diagram

The purpose of Figure 1 is to illustrate the relationship between some of the key planning and financial documents that are used in transportation planning. The figure is designed so that the long-range planning documents are at the top and progress down towards implementation and construction of particular projects and programs. A brief description of each document is included below.

Transportation Master Comprehensive Plan Plan (TMP) Transportation Facilities Plan (TFP) **6-Year Transportation Improvement Program** Emergencies (TIP) and **Opportunities** Transportation Capital **Investment Program** (CIP) Developer or Outside City Designs and Agency Designs and Constructs Specific **Constructs Projects Projects**

Figure 1 - Transportation Planning Flow Chart

Transportation Planning Flow Chart Definitions

• Transportation Master Plan (TMP) and Comprehensive Plan: These documents include the vision, strategies, and ultimate transportation plan for the community.

- Transportation Facilities Plan (TFP): Facilities elements of Comprehensive Plan modeled to balance planned concurrency with target land use for target year. These are updated periodically and at five-year intervals.
- 6-Year Transportation Improvement Program (TIP): Annually updated plan for all committed and needed improvements in the next six years. Required by RCW.
- Capital Investment Program (CIP): City funded projects updated with the twoyear budget cycle.
- **Developers and Outside Agency Designs and Constructs Projects:** Projects constructed and paid for by developers and outside agencies (e.g. WSDOT, Sound Transit, and Bellevue). In some cases the City contributes some funding to these projects.
- City Designs and Constructs Specific Projects: These are the individual CIP projects that the City of Redmond designs and builds.

NOTES:

- 1. Council approves every step of the process from the Transportation Master Plan through acceptance of construction of city projects.
- 2. In addition to the Transportation Facilities Plan, the City of Redmond Comprehensive Plan and Transportation Master Plan include several other key elements such as: Vision, Goals, Policies, modal elements, performance monitoring, regional transportation, 3-year Priority Action Plan and Thoroughfare Plan.